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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,460	09/30/2003	SL OUYANG	9842-US-PA	2459

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JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
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EXAMINER

PATEL, GAUTAM

ART UNIT PAPER NUMBER

2627

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/605,460

Applicant(s)

OUYANG, SL

Examiner

Gautam R. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/29/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/29/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-16 are pending for the examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

NOTES & REMARKS

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. For example see page 5, line 5.

Applicant's cooperation is requested in correcting any errors of which Applicant may become aware in the specification.

Content of Specification Objected

4. The disclosure is objected for following reasons.

Specification needs to be updated with respect to information on the related applications.

Cross-References to Related Applications: See 37 C.F.R. § 1.78 and section 201.11 of the M.P.E.P.

Correction are required.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,015,836.

Although the conflicting claims are not identical, they are not patentably distinct from each other because one of ordinary skill in the art would have realized that eliminating a step or an element and its function are not patentable if the function of the step is not desired as shown in *Ex parte Wu*, 10 USPQ 2031 (Bd. Pat. App. & Inter. 1989). See also *In re Larson*, 340 F.2d 965, 144 USPQ 347 (CCPA 1965); and *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975).

As to claims 2-16, since they are also fully disclosed in the patent number 7,015,836; they are therefore considered rejected as non-statutory double patenting as set forth in the paragraphs here in above.

Claim Rejections - 35 U.S.C. § 112

6. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 13 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

“Setting the first type of logic bits, between two neighboring second type of logic bits, within the first batch of data, to ten”; required by the claims is not described in the specification.

On page 5, lines 6-7 the specification mentions more than ten bits, but does not give this count to be within ten. Accordingly, the specification does not explain to one of ordinary skill in the data processing "DP" art at the time of the invention, how to make and or use the invention comprising the claimed "within the first batch of data to ten".

8. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13, lines 2-5 “setting the first type of logic bits, between two neighboring second type of logic bits, within the first batch of data, to ten”, is confusing and unclear. It is not clear at

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all what is being set within what range especially when range is defined to MORE than ten and not ten.

Claim 13, lines 4-5 the scope of " within the first batch of data to ten " lacks proper antecedent basis.

Claim Rejections - 35 U.S.C. § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-11 and 13-16 are rejected under 35 U.S.C. § 102(e) as being anticipated by Lee et al., US. patent 6,826,137 (hereafter Lee).

As to claim 1, Lee discloses the invention as claimed [see Figs. 1 and 7] including extracting a first batch, looking up a modified decoding table and outputting the second batch of data, comprising the steps of:

extracting a first batch of data encoded in a first bit format from a serial data;

looking up a modified decoding table [look-up table are inherently present in EFM coding] to convert the first batch of data into a second batch of data encoded in a second bit format, wherein the modified decoding table includes a data conversion for a first batch of data that does not conform to a standard modulation rule; and

outputting the second batch of data [col. 6, lines 22-52].

10. The aforementioned claim 2, recites the following steps, inter alia, disclosed in Lee:

the first bit format is encoded in 14 bits and the second bit format is encoded in 8 bits [col. 6, lines 41-50].

11. The aforementioned claim 3, recites the following steps, inter alia, disclosed in Lee:

the first batch of data that does not conform to the standard modulation rule has less than two first type of logic bits between two neighboring second type of logic bits within the first batch of data [col. 5, line 28 to col. 6, line 7].

12. The aforementioned claim 4, recites the following steps, inter alia, disclosed in Lee:
the first batch of data that does not conform to the standard modulation rule has more than ten first type of logic bits between two neighboring second type of logic bits within the first batch of data [col. 5, lines 9-52].

13. The aforementioned claim 5, recites the following steps, inter alia, disclosed in Lee:
the optical system is able to read data from a compact disk read-only-memory (CD-ROM) [col. 4, line 59 to col. 5, line 8].

14. The aforementioned claim 6, recites the following steps, inter alia, disclosed in Lee:
the standard modulation rule is an eight-to-fourteen modulation (EFM) and the standard modulation rule follows an EFM standard [col. 4, lines 37-58].

15. The aforementioned claim 7, recites the following steps, inter alia, disclosed in Lee:
the modified decoding table comprises transformation entries conformable to the EFM standard [col. 4, lines 37-58].

16. The aforementioned claim 2, recites the following steps, inter alia, disclosed in Lee:

17. As to claims 8-11 and 14-16, they are method claims corresponding to claims 1-7 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 1-7 respectively, above.

18. A search based on the best understanding of the claims has been made to find the most pertinent art, but no statement about invention will be appropriate at this time regarding the allowableness of claims 13 and no art rejection will be made in this office action regarding the claims 13, due to the speculation required to interpret the claims because of their indefiniteness under 35 U.S.C. 112, 1st and 2nd paragraphs as noted above (see In re Steele, 134 USPQ 292).

Allowable Subject Matter

19. Claim 12 is objected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

NOTE: Claim 12 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose data decoding method in an optical disk system which includes extracting a first batch of data which includes converting 14 bits to 8 bits and where “a first batch of data that does not conform to standard modulation rule has more than ten first type of logical bits between two neighboring second type of logic bits within the first batch of data”. It is noted that the closest prior art, Yoshimura et al. (US 5,764,166) shows a similar apparatus which decodes data and outputs number of “0” which are less than 10.

However Yoshimura et al. fails to disclose more than 10 bits after the conversion.

Other prior art cited

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Yoshimura et al. (US. Patent 5,764,166).
- b) Okada et al. (US. patent 6233213).
- c) Okazaki et al. (US. patent 5969651)

Contact information

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 571-273-8300.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.

**GAUTAM R. PATEL
PRIMARY EXAMINER**



Gautam R. Patel
Primary Examiner
Group Art Unit 2627

July 29, 2006